

IN THE CLAIMS:

1. (Currently Amended) A coin separating unit comprising:

a coin transporting unit for receiving coins of different size on a support surface that translates the coins for subsequent processing, the support surface having a predetermined flexibility and friction characteristic to engage the coins for translation and to enable coin
5 movement transverse to a direction of movement;

a separating roller unit positioned above the support surface at a distance no greater than twice the thickness of the coins to be separated, the surface of the separating roller unit closest to the support surface moving in a direction opposite to the movement of the support surface; and

10 a supporter unit includes a roller member mounted on a pivotable lever operatively located upstream of the separating roller unit, relative to movement of the support surface and adjacent the separating roller unit, the supporter unit is movably located above the support surface by a distance which approximates the thickness of the coins to be separated wherein the supporter unit can move transverse to the support surface when engaging a coin and
15 can assist in preventing more than one coin from passing beneath it before the coin engages the separating roller unit and the flexibility of the support surface accommodates relative movement of a coin to assist in preventing coin jams, the separating roller unit and the roller member rotates about parallel axes extending across the support surface whereby the separating roller unit and the roller member when contacting a coin in translation, forces the support surface away from the
20 separating roller unit when passing the coin beneath the separating roller unit.

2. (Previously Presented) The coin separating unit of Claim 1 wherein the separating roller unit is rigidly fixed above the support surface.

3. (Original) The coin separating unit of Claim 1 further including a coin drawing auxiliary unit is located downstream of the separating roller unit.

4. (Original) The coin separating unit of Claim 1 wherein the separating roller unit rotates so that its surface closest to the support surface is moving opposite to the translation direction of the support surface.

5. (Cancelled)

6. (Currently Amended) The coin separating unit of Claim [[5]] 1 wherein the supporter unit is biased by a predetermined force towards the support surface.

7. (Original) The coin separating unit of Claim 6 wherein the supporter unit is biased by a spring member.

8. (Original) The coin separating unit of Claim 1 further including a second coin transporting unit for receiving a coin from the first coin transporting unit and translating the coin at a faster speed than the first coin translating unit.

9. (Previously Presented) In a coin separating assembly for separating coins of different sizes, the improvement comprising:

a coin hopper for receiving various coins of different sizes in bulk;

a rotating belt positioned under the coin hopper for receiving coins from the coin
5 hopper by a gravity feed, the rotating belt has a pivoting support member with an elongated
surface for supporting an underside of the rotating belt; and

a separating roller unit positioned above the rotating belt at a distance no greater
than twice the thickness of the coins to be separated, the surface of the separating roller unit
closest to the rotating belt moving in a direction opposite to the movement of the support surface,
10 wherein the rotating belt has a predetermined flexibility to enable a coin to be
pushed by the separating roller unit into the rotating belt and the pivoting support member can
accommodate the coin movement transverse to the directional movement of the belt by tilting the
elongated surface on an underside of the rotating belt.

10. (Currently Amended) In a coin separating assembly for separating coins of
different sizes, the improvement comprising:

a coin transporting unit including a rotating belt for translating coins along a
direction of movement having a predetermined flexibility to permit displacement of a coin being
5 translated in a transverse direction;

a separating roller unit having a plurality of separating rollers rotably mounted at
a fixed distance above a coin supporting surface of the rotating belt; and

a supporter roller unit, operatively located upstream of the separating roller unit
and adjacent the separating roller unit, including at least one supporter roller ~~[[unit]]~~ rotably
10 mounted to contact any overlaying coins and assist in permitting ~~[[the]]~~ any underlaying coin to
pass to the separating roller unit while displacing the overlaying coin, wherein the coins can pass
beneath the separating roller unit and the rotating belt can flex to increase the distance beneath

the separating roller unit as the coin passes underneath, the separating roller unit and the supporter roller unit rotate about parallel axes extending above and across the rotating belt.

11. (Currently Amended) A coin separating unit comprised of:

a coin transporting unit including a flexible rotatable belt where plural coins are ~~located on it and they~~ are transported towards a storing direction by the rotatable belt;

a separating roller which is located above the ~~coin transporting unit~~ rotatable belt
5 at a distance which is, at most, two times ~~[[the]]~~ a thinness of the thinnest coin of the plural coins
or less, at least when the ~~coin transporting unit~~ rotatable belt moves in the storing direction,
~~[[the]]~~ a peripheral surface of the rotatable belt moves in the opposite direction to the storing
direction, underneath the separating roller; and

~~the coin transporting unit and the separating roller can move relative for~~
10 increasing the distance;

a supporter roller unit which is located upstream from the separating roller and is
located above the ~~coin transporting unit~~ rotatable belt at a distance which is, at most, the thinness
of the thinnest coin or less, and it moves away from the ~~coin transporting unit by~~ rotatable belt
when the coin contacts the supporter roller unit, the separating roller and the supporter roller unit
15 rotate about parallel axes extending above and across the rotatable belt.

12. (Currently Amended) The coin separating unit as claimed in claim 11:

~~the coin transporting unit~~ rotatable belt can resiliently bend ~~down to a coin putting~~
~~surface in a right angle direction, and~~ downward at the position of the separating roller, which is
fixed at a predetermined position above the rotatable belt when a coin passes beneath the
5 separating roller.

13. (Cancelled)

14. (Currently Amended) The coin separating unit as claimed in claim [[13]] 11:

the supporting roller unit is rotatable on a lever, which is pivotable and is coaxially to the separating roller, also the supporting roller is urged to the coin transporting unit by a predetermined force.

15. (Currently Amended) The coin separating unit as claimed in claim [[13]] 11:

the supporting roller unit has contact with the ~~transporting unit~~ rotatable belt and is rotated by the ~~coin transporting unit~~ rotatable belt.

16. (Currently Amended) The coin separating unit as claimed in claim 11:

further including a coin drawing auxiliary unit located downstream of the separating roller unit.

17. (Currently Amended) The coin separating unit as claimed in claim 11, the separating roller rotates ~~in the same direction to the coin transporting unit relative to the~~ in an opposed movement ~~[[of]]~~ to the coin transporting unit.

18. (Currently Amended) The coin separating unit as claimed in claim 11:

the drawing auxiliary unit is located downstream of the coin transporting unit and a second coin transporting unit beneath the drawing auxiliary unit moves faster than the coin transporting unit.

19. (Currently Amended) The coin separating unit as claimed in claim ~~[[11]]~~ 18:

the drawing auxiliary unit is a roller which is located downstream of the separating roller and has a distance which is, at most, thinner than the thinnest coin and is located away from the second coin transporting unit.

20. (Currently Amended) The coin separating unit as claimed in claim 11:

the distance between the separating roller and the coin transporting unit is less than two times the thickness of the thinnest coin and larger than the thickness of the thickest coin of the plural coins.

21. (Currently Amended) The coin separating unit as claimed in claim 11:

the supporter ~~unit is a~~ roller ~~[[that]]~~ unit rotates in ~~[[the]]~~ an opposite direction to the movement of the coin transporting unit~~[[,]]~~ when moving ~~[[the]]~~ a coin towards the storing direction.

22. (New) The coin separating unit as claimed in Claim 1 wherein a support member is mounted for relative movement adjacent and underneath the coin transporting unit to limit the extent of transverse coin movement beneath the separating roller unit.

23. (New) The coin separating unit as claimed in Claim 11 wherein a support member is mounted for relative movement adjacent and underneath the rotatable flexible belt to limit the extent of transverse coin movement beneath the separating roller unit.

24. (New) The coin separating unit as claimed in Claim 11 wherein the rotatable flexible belt is formed with a urethane rubber surface and a polyamide core.

25. (New) The coin separating unit as claimed in Claim 11 wherein a one way clutch member provides rotation to the separating roller.

26. (New) The coin separating unit as claimed in Claim 11 wherein a diameter of the separating roller is twice a diameter of supporter roller unit.

27. (New) A coin separating unit comprised of:

a coin transporting unit including a rotating belt mounted on a pair of rollers for translating coins along a direction of movement, the rotating belt has a predetermined flexibility to permit displacement of a coin being translated in a traverse direction to the direction of
5 movement wherein plural coins on the rotating belt are transported towards a storing direction;

a separating roller unit is rigidly fixed above a surface of the rotating belt at a distance which is at most two times a thinness of a thinnest coin or less, the rotating belt moves in the storing direction, a peripheral surface of the separating roller unit is driven in an opposite direction to the storing direction, the rotating belt bends elastically relative to the separating
10 roller for increasing coin passage distances between the surface of the rotating belt and the peripheral surface of the separating roller unit;

a supporting roller unit is located upstream from the separating roller unit above the rotating belt and adjacent the peripheral surface of the separating roller unit to control coins and is rotatable on a first lever which is pivotable and coaxially to the separating roller unit, the
15 supporting roller unit is urged toward the rotating belt by gravity, the separating roller unit and the supporting roller unit rotate about parallel axes extending above the rotating belt; and

a drawing roller unit is located downstream from the separating roller unit and is located above the rotating belt to contact coins, the drawing roller unit is adjacent the peripheral surface of the separating roller unit and is rotatable on a second lever which is pivotable and
20 coaxially to the separating roller unit, the supporting roller is urged toward the rotating belt by gravity, to have contact with the rotating belt;

wherein the supporting roller unit is positioned to contact a coin on the rotating belt, and press the coin into the rotating belt by gravity, the pressed coin is nipped by the rotating belt and the separating roller unit, and the rotating belt is elastically bent by the coin, as the
25 nipped coin passes through the distance between the rotating belt and the separating roller unit, the nipped coin is then pressed into the rotating belt by the drawing roller unit and is drawn by the drawing roller and the rotating belt, thereafter the drawn coin is transported toward a second coin transporting unit by the drawing roller unit and the rotating belt.

28. (New) The coin separating unit of claim 27 wherein the second coin transporting unit for receiving a coin from the rotating belt includes a second belt which is driven at a faster speed than the rotating belt, and a drawing auxiliary roller unit is attached to a second lever downstream from the drawing roller unit, and the drawing auxiliary roller unit can contact with
5 the second belt by gravity.